

Amendments to the Claims

This claim listing replaces all prior versions and listings of claims in the application.

1-48 (Canceled)

49-95 (Canceled)

96. (New) A method of treating keratinous material comprising the steps of:

a) bringing said keratinous material into contact with a formulation, and

b) rinsing the keratinous material with an aqueous rinsing medium,

wherein the formulation comprises a stable dispersion having a pH ranging from 3 to 5.5, and

further wherein the formulation comprises at least one active material, a carrier agent comprising at least one organic polymer capable of bringing said active material to the surface of the keratinous material during rinsing step b) and, optionally, at least one salt that is soluble in the formulation;

wherein the active material:

- optionally comprises a liquid,
- comprises, in the medium of the formulation, an overall cationic or zero charge,
- is insoluble in the medium of the formulation,
- is stabilized in the medium of the formulation by at least one cationic and/or nonionic surfactant, and

- remains insoluble in an aqueous rinsing medium or is capable of swelling in the aqueous rinsing medium; and

wherein the carrier agent:

- is soluble or dispersible in the medium of the formulation and in the aqueous rinsing medium,

- comprises, in the medium of the formulation, an overall ionic charge that is zero or cationic, and

is capable of developing, at the pH of the rinsing process in the aqueous rinsing medium, a sufficient number of anionic charges to destabilize the active material in the aqueous rinsing medium.

97. (New) The method of claim 96, wherein the active material comprises, in encapsulated, dispersed, or solubilized form, at least one liquid or solid hydrophobic active compound that is different from the active material.

98. (New) A method for improving the deposition of an active material onto a keratinous material, comprising the steps of:

- a) applying a formulation to said material and, then,
- b) rinsing said material with an aqueous rinsing medium;

said formulation comprising at least one active material and, optionally, at least one salt that is soluble in the formulation, and being in the form of a stable dispersion, the pH of which ranges from 3 to 5.5,

the active material comprising, optionally in an encapsulated, dispersed or solubilized form, at least one hydrophobic organic active compound that is different from the active material;

said active material, optionally being in a liquid form, and comprising, in the medium of the formulation, an overall cationic or zero charge, being insoluble in the medium of the formulation, being stabilized in the medium of the formulation by a cationic surfactant, and remaining insoluble in the rinsing medium or being capable of swelling in the rinsing medium;

by addition of at least one carrier agent comprising at least one organic polymer that is

soluble or dispersible in the medium of the formulation and in the rinsing medium, comprising, in the medium of the formulation, an overall ionic charge that is zero or cationic and being capable of developing, at the pH of the rinsing process in the rinsing medium, a sufficient number of anionic charges to destabilize the active material in the rinsing medium.

99. **(New)** The method of claim 96, wherein in step a) the formulation is present in an amount, expressed as solids content, ranging from 0.001 to 10 g/l.

100. **(New)** The method of claim 96, wherein the aqueous rinsing medium has a pH ranging from 5.5 to 8.

101. **(New)** The method of claim 96, wherein the active material comprises solid particles dispersed in the medium of the formulation and comprises:

- a) a nonionic polymer derivable from at least one nonionic hydrophobic monomer,
- b) a polymer derivable from at least one nonionic hydrophobic monomer and from at least one monomer that is cationic or potentially cationic in the medium of the formulation and, optionally, from at least one monomer that is neutral in the medium of the formulation and potentially anionic in the rinsing medium, or
- c) a polymer derivable from at least one nonionic hydrophobic monomer and from at least one monomer that is neutral in the medium of the formulation and potentially anionic in the rinsing medium.

102. **(New)** The method of claim 101, wherein the monomer composition from which said polymers are derivable comprises:

at least one uncharged or non-ionizable hydrophilic monomer, optionally in an amount that does not exceed 50% of the total mass of monomers,

and/or at least one zwitterionic monomer, optionally in an amount that does not exceed 30% of the total mass of monomers,

and/or at least one crosslinking monomer, optionally in an amount that does not exceed 10% of the total mass of monomers.

103. **(New)** The method of claim 101, wherein the polymer b) comprises an anionic monomer, the first pKa of which is less than 6, such that said polymer b) has, in the medium of the formulation, an overall cationic charge.

104. **(New)** The method of claim 103, wherein the first pKa is less than 3.

105. **(New)** The method of claim 101, wherein, when the active material is an ionic or ionizable polymer, it is:

insoluble in the medium of the formulation;
comprises, in the formulation, an overall cationic or zero charge; and
remains insoluble in the rinsing medium or is not capable of swelling by more than 8 times its volume in the rinsing medium.

106. **(New)** The method of claim 105, wherein, when the active material is not capable of swelling by more than 4 times its volume in the aqueous rinsing medium.

107. **(New)** The method of claim 96, wherein the active material comprises particles of polymer, the mean diameter of which ranges from 10 nm to 10 μ m.

108. **(New)** The method of claim 96, wherein the active material comprises a polymer that derives from monomers that are α - β monoethylenically unsaturated or diethylenically unsaturated.

109. **(New)** The method of claim 96, wherein the active material comprises a polymer having a glass transition temperature (Tg) ranging from -80°C to +150°C.

110. **(New)** The method of claim 109, wherein the active material comprises a polymer having a glass transition temperature (T_g) ranging from -80°C to +40°C.

111. **(New)** The method of claim 96, wherein the active material comprises a polymer that is insoluble in the medium of the formulation and in the aqueous rinsing medium, and further wherein the active material comprises polymers derived from at least one nonionic hydrophobic monomer and from 0.1 to 20% of their weight of at least one monomer that is potentially cationic in the medium of the formulation.

112. **(New)** The method of claim 96, wherein the active material comprises a polymer capable of swelling in the aqueous rinsing medium, comprising polymers derived from at least one nonionic hydrophobic monomer and from 10 to 50% of their weight of at least one monomer that is potentially anionic in the aqueous rinsing medium.

113. **(New)** The method of claim 96, wherein the active material comprises particles of polymer comprising, encapsulated in said particles, at least one liquid or solid hydrophobic organic active compound that is different from the active material.

114. **(New)** The method of claim 96, wherein the zeta potential of the active material dispersed in the medium of the formulation ranges from 0 to +50 mV.

115. **(New)** The method of claim 96, wherein the active material comprises mineral oils; organic oils; fats; waxes; silicone oils; resins; gums; aromas; essential oils; fragrances; antimicrobial agents; liposoluble vitamins; phospholipids; bactericides; or UV-absorbing agents, or mixtures thereof.

116. **(New)** The method of claim 115, wherein the active material comprises at least one silicone oil.

117. **(New)** The method of claim 96, wherein the active material further comprises at least one liquid or solid hydrophobic organic active compound that is solubilized or dispersed and is different from the active material.

118. **(New)** The method of claim 117, wherein the amount by weight of the at least one cationic and/or nonionic surfactant comprises less than or equal to 25% by weight of the formulation.

119. **(New)** The method of claim 118, wherein the amount by weight of the at least one cationic and/or nonionic surfactant comprises less than or equal to 5% by weight of the formulation.

120. **(New)** The method of claim 96, wherein the medium of the formulation is an aqueous or aqueous-alcoholic medium.

121. **(New)** The method of claim 120, wherein the aqueous-alcoholic medium comprises at least one alcohol in an amount up to and including 70% of the volume of the medium of the formulation.

122. **(New)** The method of claim 96, wherein the carrier agent comprises a polymer that is soluble or dispersible in an aqueous or aqueous-alcoholic medium having a pH ranging from 3 to 8, said polymer comprising at least one unit that is neutral in the medium of the formulation and potentially anionic in the rinsing medium.

123. **(New)** The method of claim 122, wherein the carrier agent comprises

- at least one unit that is cationic or potentially cationic in the medium of the formulation, or
- at least one hydrophilic or hydrophobic, nonionic unit, or
- mixtures thereof.

124. **(New)** The method of claim 96, wherein the overall charge of the carrier agent is cationic.

125. **(New)** The method of claim 96, wherein during the rinsing step (b), the number of anionic charges developed in the rinsing medium by the carrier agent is sufficient to destabilize the active material in the rinsing medium.

126. **(New)** The method of claim 125, wherein the number of anionic charges developed in the aqueous rinsing medium by the carrier agent is at least 1% relative to the number of surface cationic charges of the active material in the aqueous rinsing medium, and at most 200% relative to the number of surface cationic charges of the active material in the medium of the formulation.

127. **(New)** The method of claim 96, wherein the carrier agent comprises a polymer comprising polymers derivable from ethylenically unsaturated monomers, natural polysaccharides that are potentially anionic, substituted or modified polysaccharides that are potentially anionic or amphoteric, or mixtures thereof.

128. **(New)** The method of claim 96, wherein the carrier agent comprises a polymer derivable: from at least one α - β monoethylenically unsaturated monomer that is neutral in the medium of the formulation and potentially anionic in the aqueous rinsing medium, and, optionally, from at least one α - β monoethylenically unsaturated monomer that is cationic or potentially cationic in the medium of the formulation, and optionally, from at least one hydrophilic or hydrophobic, nonionic α - β monoethylenically unsaturated monomer.

129. **(New)** The method of claim 96, wherein the carrier agent comprises a random, block or grafted polymer derivable: from at least one α - β monoethylenically unsaturated hydrophilic monomer that is neutral in the medium of the formulation and potentially anionic in the aqueous rinsing medium, and

from at least one α - β monoethylenically unsaturated hydrophilic monomer that is cationic or potentially cationic in the medium of the formulation, and,
optionally, from at least one hydrophilic or hydrophobic, nonionic α - β monoethylenically unsaturated monomer.

130. (New) The method of claim 96, wherein the carrier agent is derivable from one or more α - β monoethylenically unsaturated monomers and has a mean molar mass by weight of greater than 5000 g/mol.

131. (New) The method of claim 96, wherein the carrier agent comprises:

polyacrylic or polymethacrylic acids, alkali metal polyacrylates or polymethacrylates;

acrylic acid/DADMAC polymers, having a molar ratio ranging from 50/50 to 30/70;

acrylic acid/MAPTAC polymers, having a molar ratio ranging from 60/40 to 30/70;

acrylic acid/MAPTAC/linear C₄-C₁₈ alkyl methacrylate polymers comprising from 0.005 to 10% by mass of alkyl methacrylate, and having an acrylic acid/MAPTAC molar ratio ranging from 60/40 to 30/70;

acrylic acid/dimethylaminoethyl methacrylate (DMAEMA) polymers, having a molar ratio ranging from 60/40 to 30/70; or

mixtures thereof.

132. (New) The method of claim 131, wherein the polyacrylic or polymethacrylic acids, alkali metal polyacrylates or polymethacrylates have a mean molar mass by weight ranging from 100,000 to 1,000,000 g/mol.

133. (New) The method of claim 131, wherein the acrylic acid/DADMAC polymers have a mean molar mass by weight ranging from 70,000 to 350,000 g/mol.

134. **(New)** The method of claim 131, wherein the acrylic acid/MAPTAC polymers have a mean molar mass by weight ranging from 90,000 to 300,000 g/mol.

135. **(New)** The method of claim 131, wherein the acrylic acid/MAPTAC/linear C₄-C₁₈ alkyl methacrylate polymers have a mean molar mass by weight ranging from 50,000 to 250,000 g/mol.

136. **(New)** The method of claim 131, wherein the acrylic acid/dimethylaminoethyl methacrylate (DMAEMA) polymers have a mean molar mass by weight ranging from 50,000 to 300,000 g/mol.

137. **(New)** The method of claim 96, wherein the carrier agent is a potentially anionic natural polysaccharide comprising nonionic monosaccharide units and monosaccharide units that are neutral in the medium of the formulation and potentially anionic in the rinsing medium, wherein said units are identical or different.

138. **(New)** The method of claim 137, wherein the potentially anionic natural polysaccharide comprises a branched polysaccharide comprising:
a main chain comprising anhydrohexose units that are identical or different, and
branches comprising at least one anhydropentose and/or anhydrohexose unit that is neutral in the medium of the formulation and optionally potentially anionic in the rinsing medium.

139. **(New)** The method of claim 137, wherein said potentially anionic natural polysaccharide comprises a xanthan gum, a succinoglycan, a rhamnan, a gellan gum, a welan gum, or mixtures thereof.

140. **(New)** The method of claim 137, wherein said potentially anionic natural polysaccharide has a mean molar mass by weight ranging from 2000 to 5,000,000 g/mol.

141. **(New)** The method of claim 96, wherein the carrier agent comprises a substituted or

modified polysaccharide, the natural backbone of which comprises nonionic monosaccharide units and/or monosaccharide units that are neutral in the medium of the formulation and potentially anionic in the rinsing medium, said monosaccharide units being identical or different,

wherein said monosaccharide units are substituted or modified:

with at least one group carrying at least one charge that is neutral in the medium of the formulation and potentially anionic in the rinsing medium, and

optionally, with at least one group carrying at least one charge that is cationic or potentially cationic in the medium of the formulation, and

wherein said substituted or modified polysaccharide is soluble or dispersible in an aqueous or aqueous-alcoholic medium and has an overall zero or cationic charge in the medium of the formulation.

142. **(New)** The method of claim 141, wherein said substituted or modified polysaccharide comprises at least one nonionic modifying group or substituent group.

143. **(New)** The method of claim 141, wherein said substituted or modified polysaccharide is a branched substituted or modified polysaccharide, the natural backbone of which comprises:

- a main chain comprising anhydrohexose units that are the same or different, and
- branches comprising at least one anhydropentose and/or anhydrohexose unit that is neutral in the medium of the formulation and optionally potentially anionic in the rinsing medium,

wherein the at least one anhydrohexose and/or anhydropentose unit of said polysaccharide are substituted or modified with one or more groups carrying:

- at least one charge that is neutral in the medium of the formulation and potentially anionic in the rinsing medium, and
- optionally, at least one charge that is cationic or potentially cationic in the

rinsing medium,

further wherein the degree of substitution or of modification (DSi) of the anhydrohexose and/or anhydropentose units with said at least one group carrying at least one charge that is ionic or potentially ionic ranging from 0.01 to less than 3,

further wherein with a ratio of the number of charges that are potentially anionic in the rinsing medium to the number of charges that are cationic or potentially cationic in the medium of the formulation ranges from 100/0 to 30/70.

144. **(New)** The method of claim 141, wherein said substituted or modified polysaccharide has a mean molar mass by weight ranging from 2,000 to 5,000,000 g/mol.

145. **(New)** The method of claim 144, wherein said substituted or modified polysaccharide has a mean molar mass by weight ranging from 10,000 to 5,000,000 g/mol.

146. **(New)** The method of claim 141, wherein the natural backbone of said substituted or modified polysaccharide comprises a galactomannan.

147. **(New)** The method of claim 141, wherein the natural backbone of said substituted or modified polysaccharide comprises carboxymethylgalactomannans, carboxymethylguars, carboxymethylhydroxypropylgalactomannans, carboxymethylhydroxypropylguars, carboxymethylhydroxypropyltrimethylammonium chloride galactomannans, carboxymethylhydroxypropyltrimethylammonium chloride guars, carboxymethylhydroxypropylhydroxypropyltrimethylammonium chloride galactomannans, carboxymethylhydroxypropylhydroxypropyltrimethylammonium chloride guars, or mixtures thereof.

148. **(New)** The method of claim 96, wherein the amount of carrier agent present in said formulation ranges from 0.001 to 5 parts by dry weight of the carrier agent per 100 parts by weight of the formulation.

149. **(New)** The method of claim 96, wherein the formulation comprises at least one soluble salt comprising chlorides, bromides, iodides, nitrates, sulfates, sulfonates of alkali metals, ammoniums, or mixtures thereof.

150. **(New)** The method of claim 96, wherein the formulation is an aqueous or aqueous-alcoholic dispersion comprising per 100 parts of its weight:

from 0.01 to 50, parts by dry weight of active material,

from 0.01 to 35, parts by dry weight of cationic surfactant,

from 0.001 to 5, parts by dry weight of carrier agent, and

at most 2 parts by weight of soluble salt.

151. **(New)** The method of claim 96, further comprising at least one constituent comprising cationic conditioners, styling agents, volumizing agents, fixing agents, repairing agents, nourishing agents, moisturizing agents, water-soluble monovalent mineral salts, dyes, fragrances, vitamins, or mixtures thereof.